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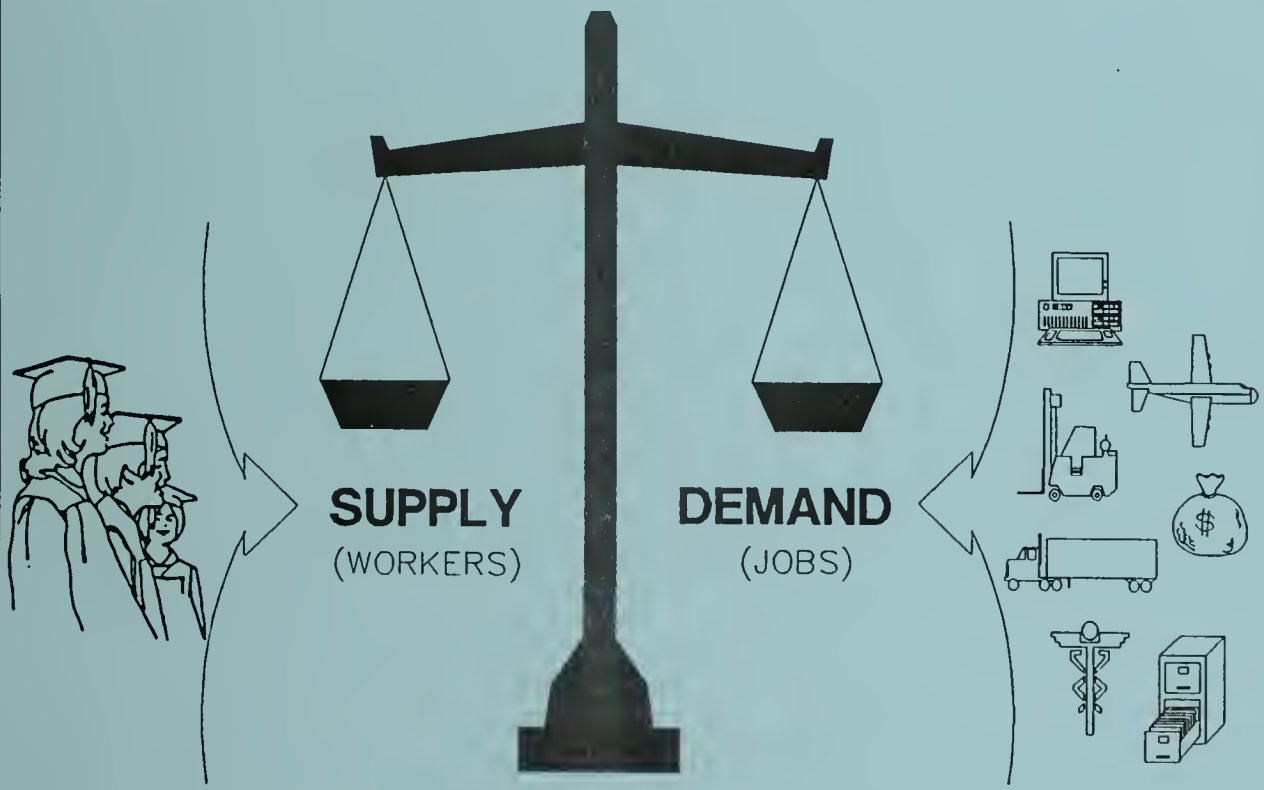
MONTANA SUPPLY/DEMAND EXECUTIVE SUMMARY

Seventh Edition
September, 1990



Montana State Occupational Information Coordinating Committee

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MONTANA

SUPPLY/DEMAND

EXECUTIVE SUMMARY

September, 1990

State of Montana
Stan Stephens, Governor

Department of Labor & Industry
Mike Micone, Commissioner

Produced by:

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Dear Reader:

The following narrative is a summary of the information contained in the **Montana Supply/Demand Report**.

If you would like a detailed copy of the **Montana Supply/Demand Report**, please fill out the form below and mail it to the Montana SOICC, P.O. Box 1728, Helena, MT 59624. There is no charge for the detailed report.

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OVERVIEW OF THE LABOR MARKET

The nation's labor market is rapidly changing. The task of keeping occupational information accurate and current is based on developing systems which can quickly identify, react to, and report changes. The labor market from now until the year 2000 will have certain characteristics which may influence the kind and amount of occupational information important to improving the quality of the work force.

There is a gap between basic skills that businesses need and qualifications of entry-level workers available to business. This imbalance between the educational preparation of those entering the labor force and industry's requirements raises an important concern about the future productivity of our labor market. Educators and business need better information to identify accurately what is needed to provide productive workers for business.

Managerial, professional, and technical occupations which require the most education will have faster rates of growth nationally than occupations with the lowest educational requirements, some of which are even projected to decline. More than half of all new jobs created between now and the year 2000 will require some education beyond high school, and almost a third will be filled by college graduates. Occupations with the fastest growth do not necessarily provide the most new jobs.

From now until the year 2000 employment growth and labor force growth will be slower than during the past 12 years. The growth will slow primarily because of the declining number of people in the 16 to 24-year-old age group. There is already a shortage of entry-level workers, particularly in geographic areas that now have low unemployment rates. Competition among employers for these workers will have an impact on colleges and universities, the military, and industries that recruit young entry-level workers.

Nationally, the service-producing sector will account for most of the job growth between now and the year 2000. Health services will account for 18 percent, business services for 16 percent, and retail trade for 22 percent. The retail trade division will increase by more than 3.7 million jobs.

Women, persons with disabilities, and minorities are all projected to increase their share of the labor force between now and the year 2000. This is primarily because the population of other groups is not growing as fast as minority groups. Employers, faced with entry workers lacking basic job entry requirements, may be forced to change their requirements. Employers may need to provide more training on the job than they do now.

Because of the decline in many industries, workers are seeking employment in a labor market for which their specific skills may be outmoded. Workers will, therefore, be forced to seek employment in new or related occupations.

USE OF LABOR MARKET AND OCCUPATIONAL INFORMATION

A continuing challenge faces education and training institutions. The challenge is to identify, design, and offer training programs that serve both the needs of individual participants and the needs of the economy and society. It is crucial that training programs designed to prepare individuals for specific occupations be realistic considering expected job openings (demand) and the expected number of persons available for and prepared to fill them (supply).

The U.S. Congress has provided funding for the development of labor market and occupational information systems. These systems provide data on occupational demand and supply critical to the proper planning of all employment-related education and training programs within a state.

Recent legislation--in particular, the Carl Perkins Vocational Education Act of 1984 and the Job Training Partnership Act (JTPA) of 1982--has stressed the value of providing and using occupational information. By mandating the development of national, state, and local occupational information systems (OIS), the common occupational needs of vocational education and employment and training programs are met. Special attention to the labor market information needs of youth and adults is provided.

Several factors must be considered in the design of training strategies. Occupational information can serve as a valuable asset to the planner. It also adds an important dimension to planning processes because it provides comprehensive data on current and expected labor market conditions. Access to this information has several potential benefits for education and training institutions. For example, it may enable these institutions to play a greater role in economic development efforts, or to respond to employers' needs in a more systematic and timely fashion. Occupational information offers planners a broad perspective of employment needs and an efficient means of learning about local labor market conditions.

Occupational information, however, cannot provide a planner with a definite quantitative indicator of what to do about a program (for example, "30 additional people need to be trained in program X"). Analysis and interpretation of possible causes for labor imbalances is not an exact science. Judgment, reason, and the experience of the planner, program advisory groups, and others all need to be considered in analyzing occupational information as a factor in program planning decisions.

Occupational information can help counselors to help their clients make better informed career decisions. Planners can also make better informed decisions. Using occupational information increases efficiency by flagging potential problems and documenting areas that are performing well. This allows planners to focus their attention and limited resources on areas that require action.

Occupational information can also provide planners with documentation to justify program decisions and aid in getting approval of plans and funding. Showing the potential impact of a program on the economy of the community and the state could prove to be a critical point in getting funding. Use of a comprehensive integrated Occupational Information System (OIS) can help planners justify decisions on the basis of economic impact and answer questions raised in the plan approval process.

The data can also help identify potential trouble spots in the performance of programs and related labor market conditions that may be causing them. OIS information can help educational planners develop programs that address the real and emerging needs of the economy.

Local governments can use information about employment, the supply of skilled workers, and available training programs to attract new businesses and industry. The system can provide information on occupational and employment trends to entrepreneurs who want to start small businesses.

Planning decisions can have broad policy implications and do involve consideration of many factors other than labor market conditions. Among them are:

- Financial resources
- Availability of qualified teachers
- Presence of tenured faculty
- Space
- Facilities
- Equipment
- Materials and curricula
- Student interest

Final recommendations about planning decisions frequently involve compromises or trade-offs of some kind between competing goals. These decisions can only be made by persons involved with and responsible for overseeing programs. What an OIS can provide is a common data base for coordinated planning within a state. It also provides a way for planners to identify and analyze areas that need attention.

The primary purpose for setting up State Occupational Information Coordinating Committees (SOICCs) was, and continues to be, the development and maintenance of a comprehensive occupational information system based on supply (workers) and demand (jobs). These data, with data from the Montana Career Information System (MCIS), are used to support the career planning, guidance, and job search needs of various populations.

USING OIS INFORMATION

The Montana Supply/Demand Report contains reports organized by clusters. A cluster is the grouping of education/training programs that have common curricula with common occupations that are typically entered as a result of the training. Occupational demand, supply, and analysis characteristics are related to each other by clusters. Montana's OIS contains 75 clusters.

OCCUPATIONAL DEMAND

Occupational demand is defined as estimated jobs based on current industry surveys. Demand reports provide information on 1986 base employment, 1995 projected employment, and estimated annual growth, replacements, and openings.

Users of demand data should be aware of the following:

- The data cover non-agricultural wage and salaried workers only (not agriculture or self-employed workers).
- Staffing patterns are based on statewide data and do not reflect possible variations from area to area of the state.
- Data are estimated, based on past trends, and therefore cannot predict unusual current or future economic conditions, or capture new occupations.
- Data should be used as estimates, not as exact figures for the state.
- Average annual openings reflect growth and replacement. They do not reflect current openings due to turnover and mobility.

OCCUPATIONAL SUPPLY

Occupational supply is defined as workers. Current Supply is the number of individuals employed in a particular occupation, plus the number of individuals qualified and seeking employment in Montana in that occupation. Montana's OIS focuses on those people who complete training programs offered throughout the state. Training programs include secondary and post-secondary level programs. These people are called completers. Users of supply data should be aware of the following:

- A common limitation in reporting completers is duplication between reporting agencies. Studies have determined that the duplication rate for completers is not more than 10% between and among state agency reporting systems.
- Other supply sources not contained in this report include persons who transfer from one occupation to another, persons who migrate in/out of Montana, and displaced workers.

OCCUPATIONAL ANALYSIS

Occupational analysis consists of data that include more definitive sources of occupational information. Data include information on apprenticeship completers, Job Service applicants and openings, and average hourly wages for selected occupations. Wage information was captured in 1986. Another wage survey is being completed at this time, and results will be available in the spring of 1991.

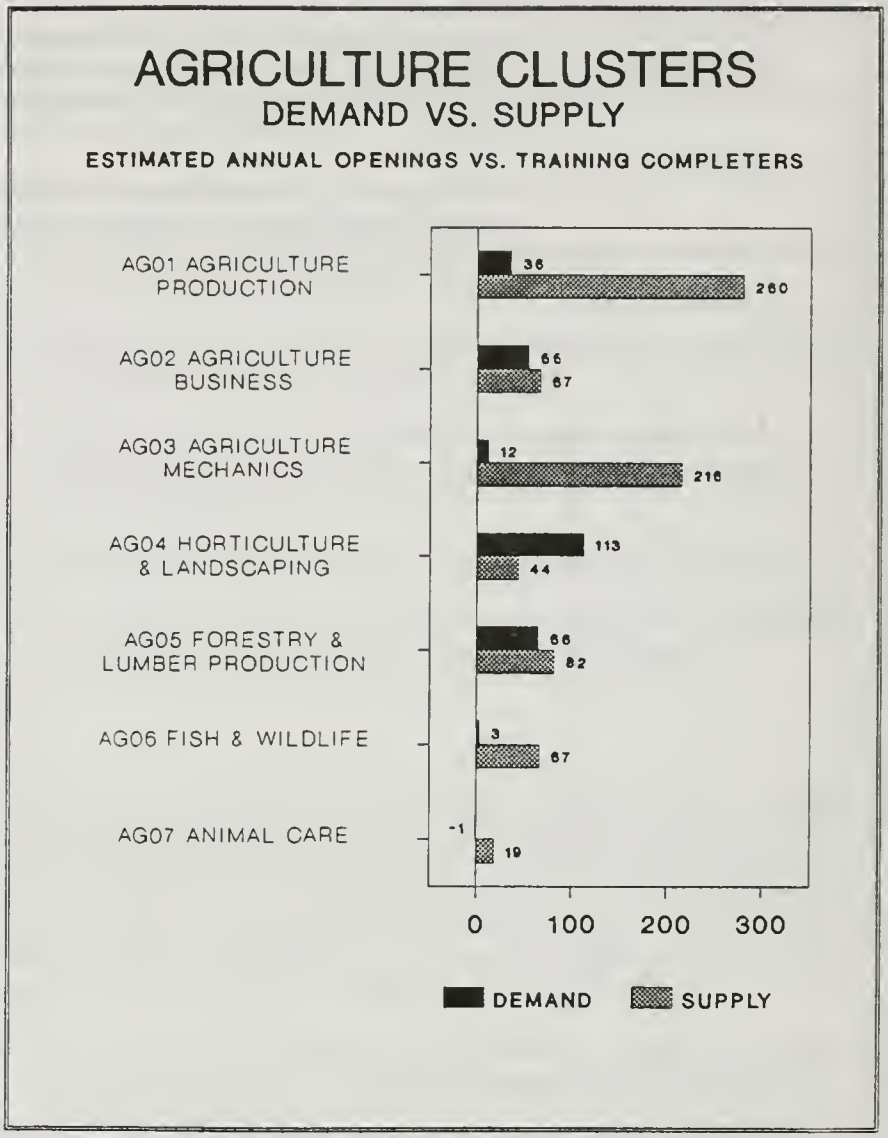
SUMMARY

In summary, statewide supply/demand data are extremely useful as a planning and counseling tool. These data do have limitations. Each counselor's and planner's professional judgment, combined with all available local data, is paramount in the planning process.

The following information is a summary of the 11 major clusters in the Montana Supply/Demand Report. Refer to Appendix 1 for a list of

Montana occupational and education/training clusters and subclusters. Appendix 2 contains graphs of major clusters and subclusters, comparing demand (number of annual openings) and supply (number of completers).

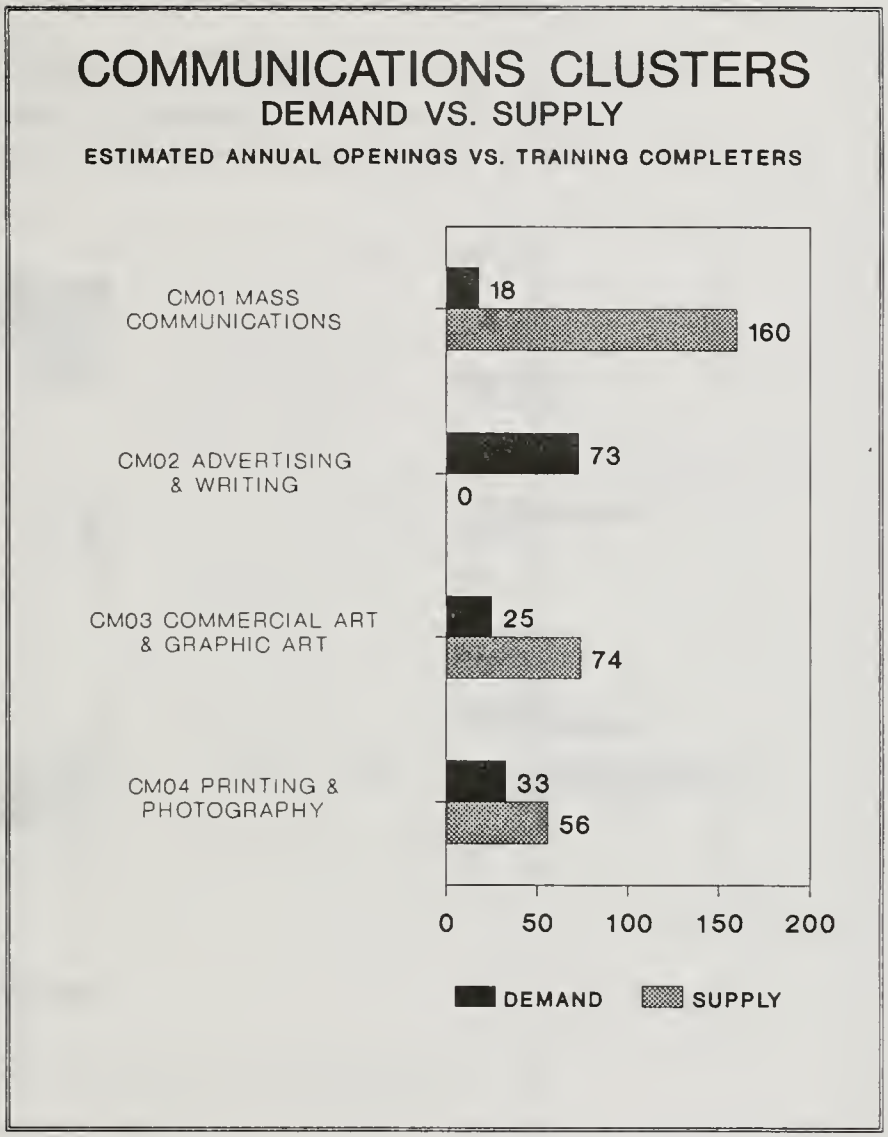
If you want a copy of the detailed Montana Supply/Demand Report, please see the front page of this executive summary for ordering information.



Agriculture Clusters

Shortage/Surplus Situation:

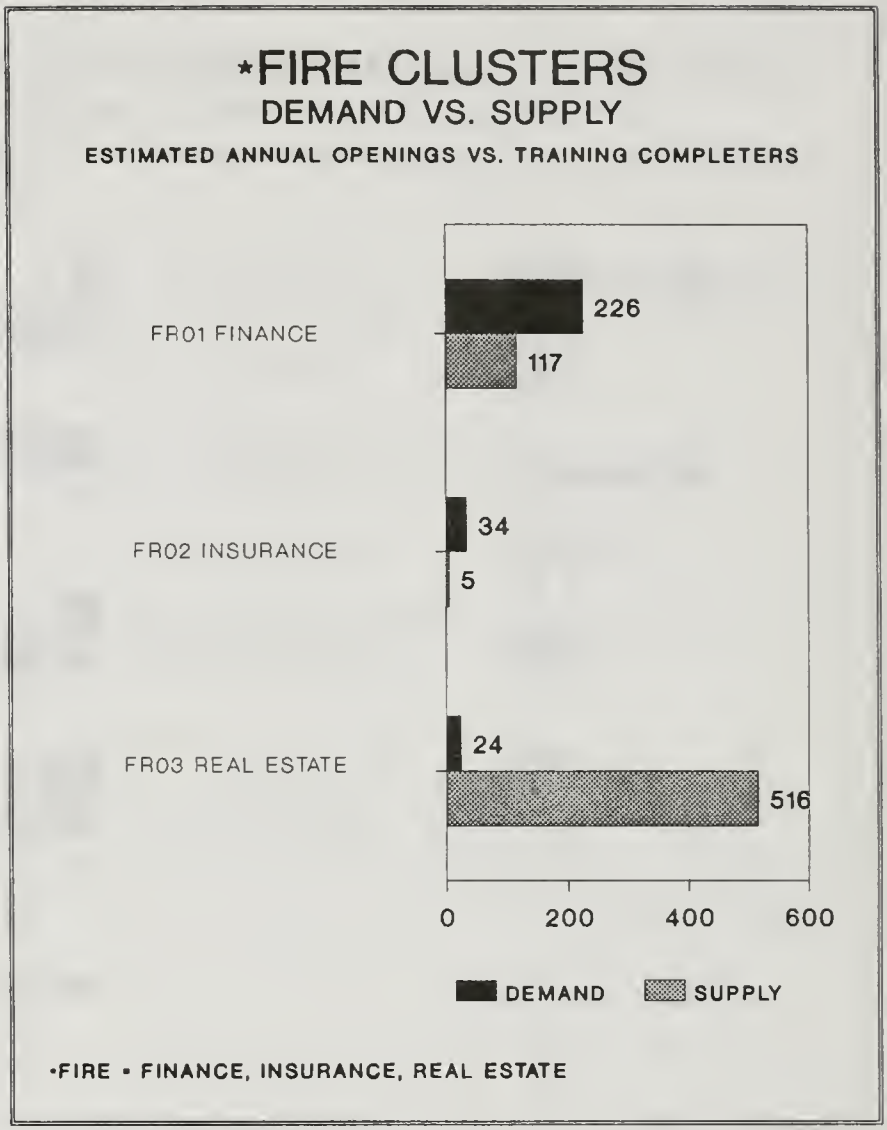
Many agricultural workers are self-employed. Self-employed workers are not reported in this data. Therefore, an accurate estimate of shortage or surplus workers in agricultural clusters is not possible.



Communications Clusters

Shortage/Surplus Situation:

Supply of trained workers outnumbers annual average openings in each communications cluster, except CM02 (Advertising and Writing). No supply data is available for CM02. Some workers in these fields are self-employed, such as writers, movie producers, graphic artists, and interior designers. This would eliminate demand information for those occupations. Most of the training for occupations in the communications clusters is at the college level.

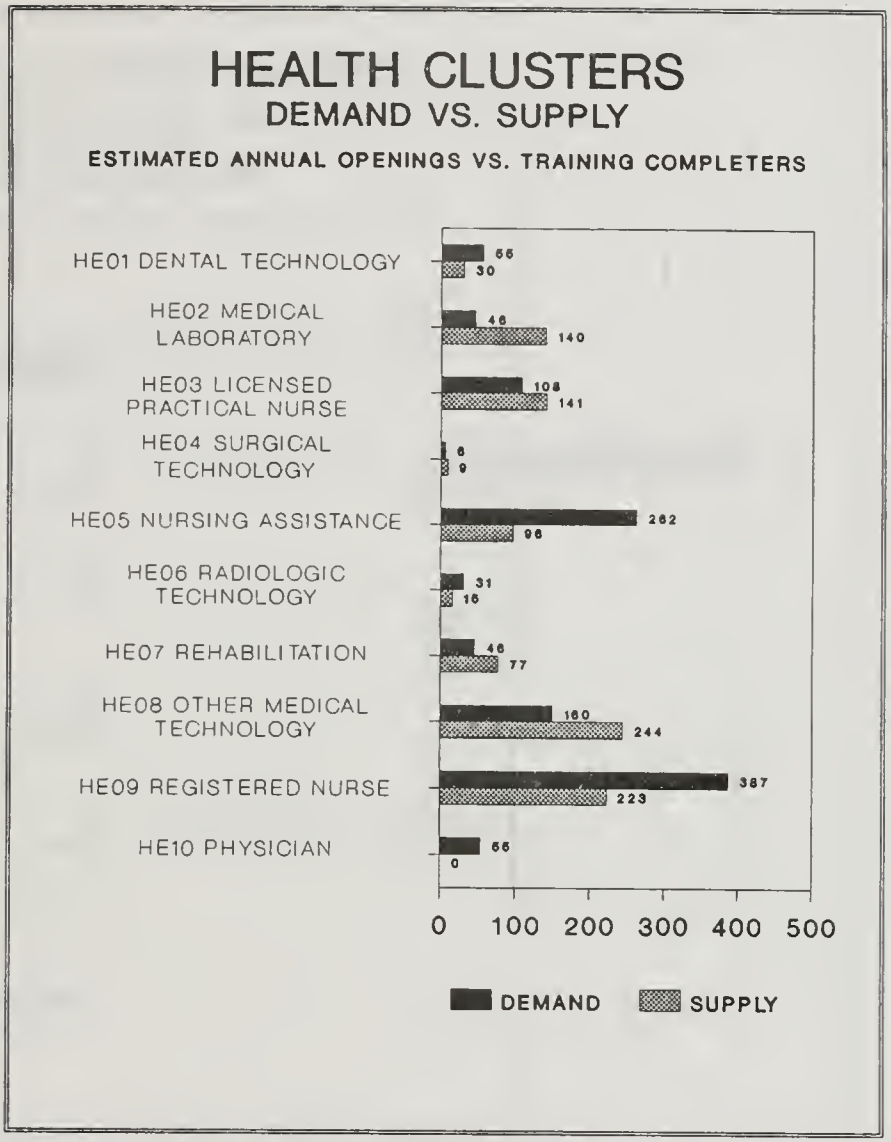


FIRE (Finance, Insurance, Real Estate) Clusters

Shortage/Surplus Situation:

Some workers in insurance occupations are self-employed. Supply of trained workers in insurance is low. Workers in insurance occupations can be trained in other programs and change their field of work.

There are many people who complete real estate training programs through private schools. This is a licensed occupation, and all people who take the training may not become licensed. Many real estate brokers are self-employed



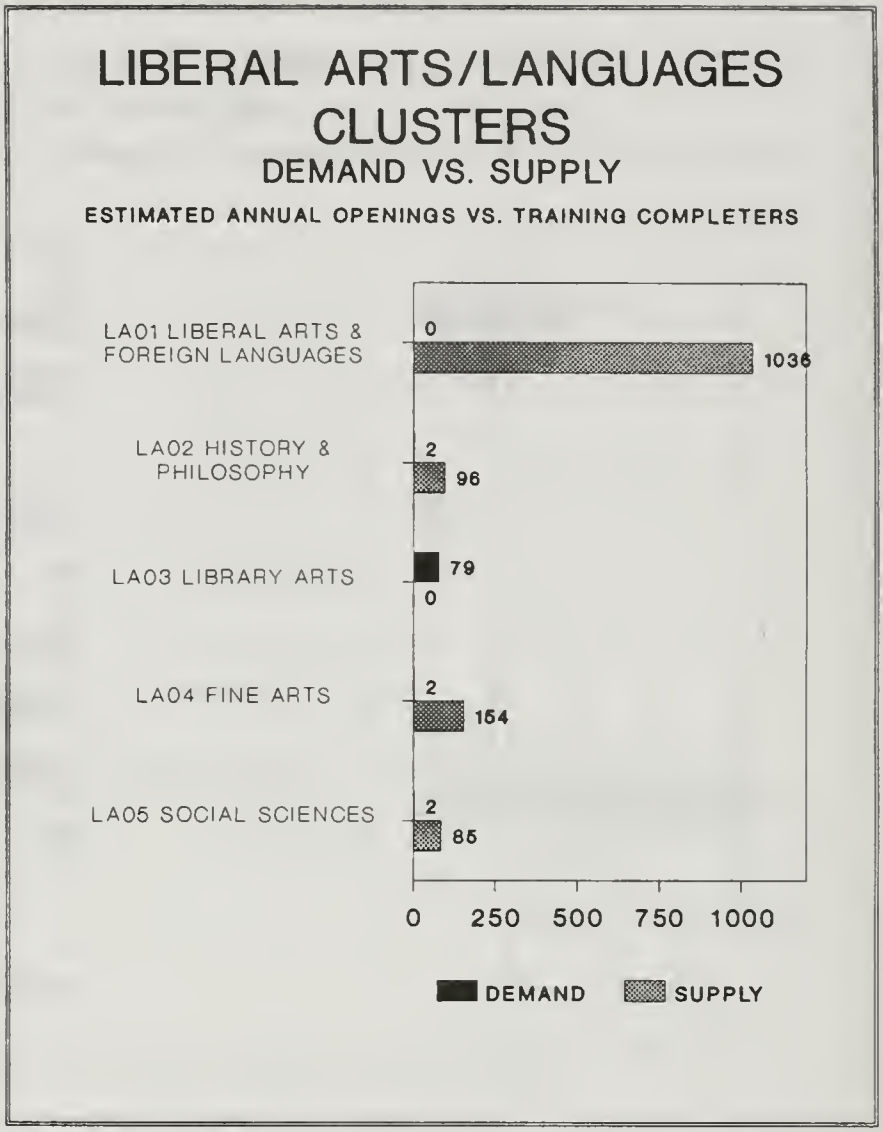
Health Clusters

Shortage/Surplus Situation:

Two occupations in these clusters are in high demand and could have potential shortages of workers. These are Registered Nurses (HE09) and Nursing Aides and Orderlies (HE05). Registered Nurses get their education through the higher education system in Montana. Nursing Aides and Orderlies receive their training through the vocational technical centers, Job Corps centers, or on-the-job. Nursing Aides and Orderlies are high-turnover jobs.

Clusters HE01 (Dental Technology) and HE10 (Physician) also show a shortage of workers. Examination of data in these clusters show occupations such as Dentists and Physicians, which are self-employed occupations. Supply/demand data is not captured for self-employed workers.

There are no serious surplus situations within the Health Clusters



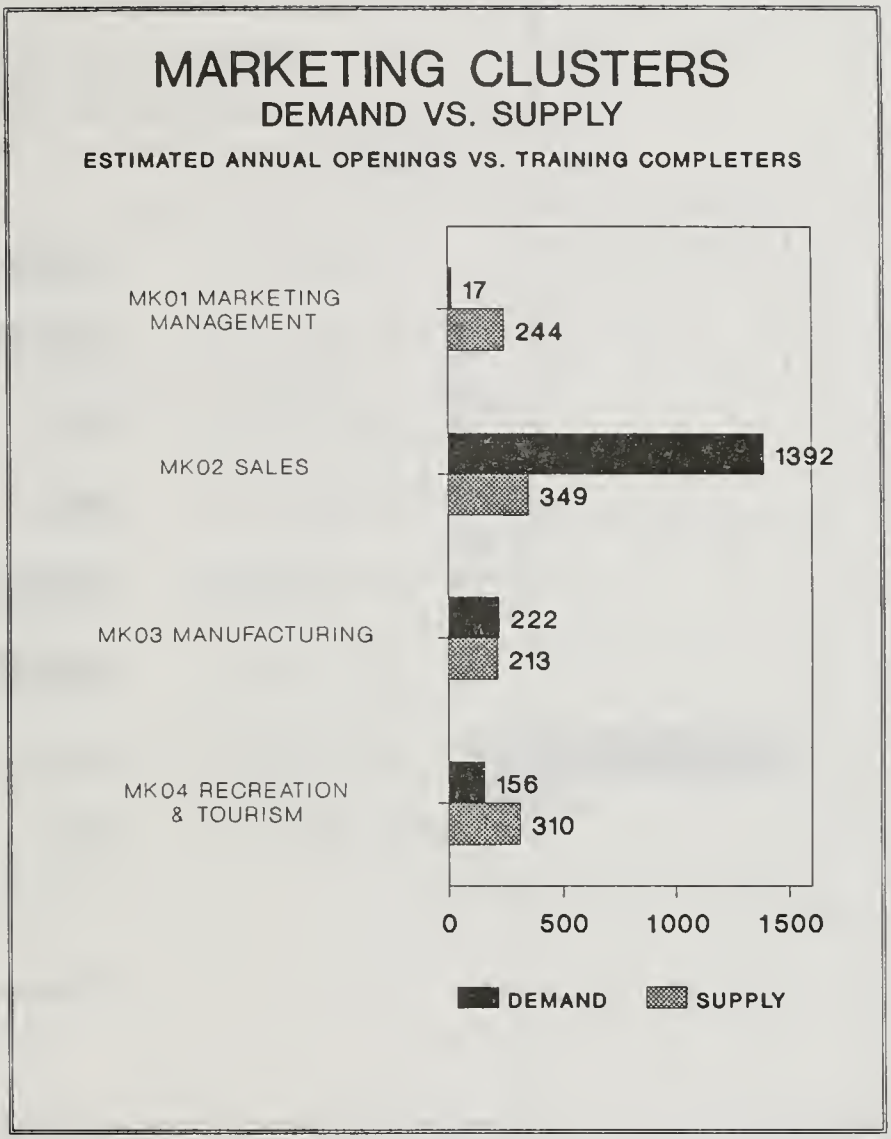
Liberal Arts/Languages Clusters

Shortage/Surplus Situation:

Supply outranks demand in each cluster except LA03 (Library Arts). There is no supply data for this cluster. Most training programs for these clusters are from higher education.

When examining the data, a surplus of trained workers shows in LA01 (Liberal Arts and Foreign Languages). There is an imbalance because Montana has few occupations that require training in a foreign language. These trained workers may be seeking employment outside Montana.

Liberal Arts graduates can enter many different occupations due to their generalized training. There is no demand information for this cluster.



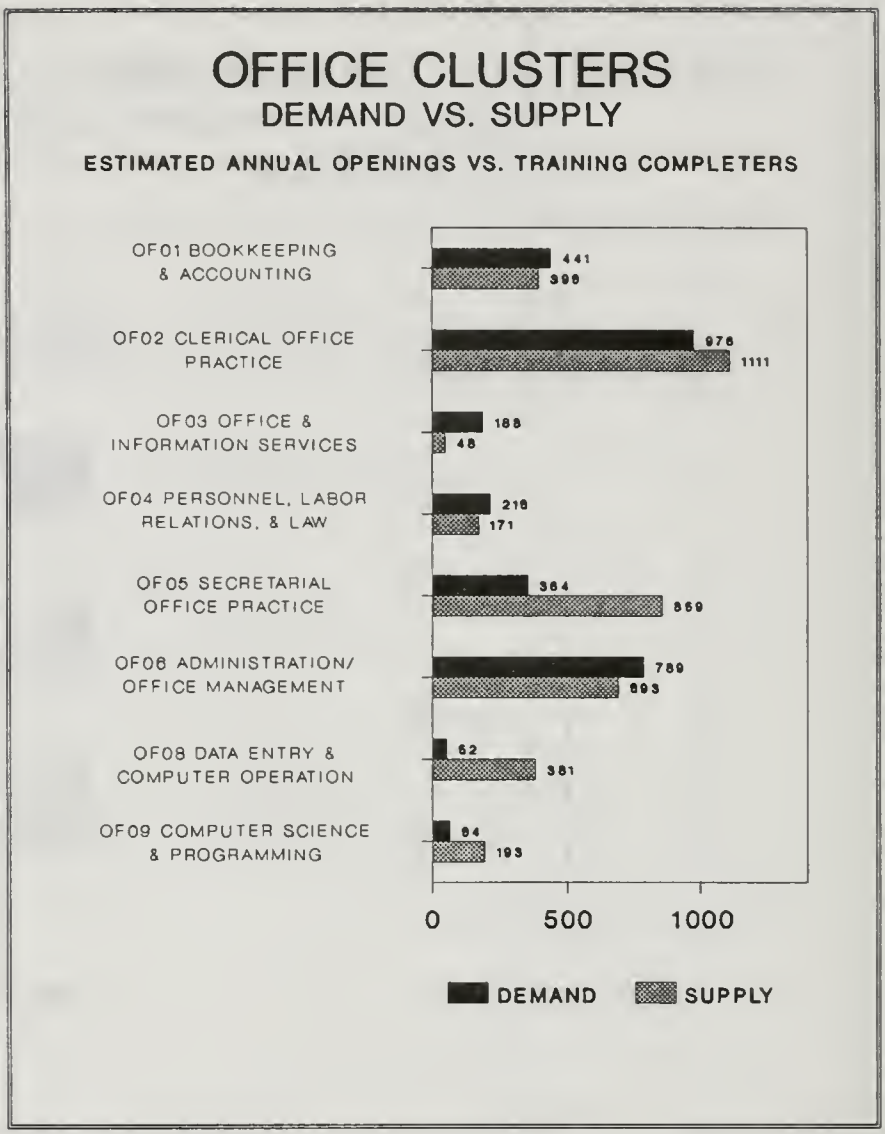
Marketing Clusters

Shortage/Surplus Situation:

Many of the jobs in these clusters require only on-the-job training.

Data shows a shortage of Retail Salespeople in MK02 (Sales). This is the highest demand occupation in Montana. Many of these jobs have a high turnover rate.

Some occupations in MK04 (Recreation and Tourism) are seasonal jobs. Some, such as hunting and outfitting guides, may also be self-employed occupations.

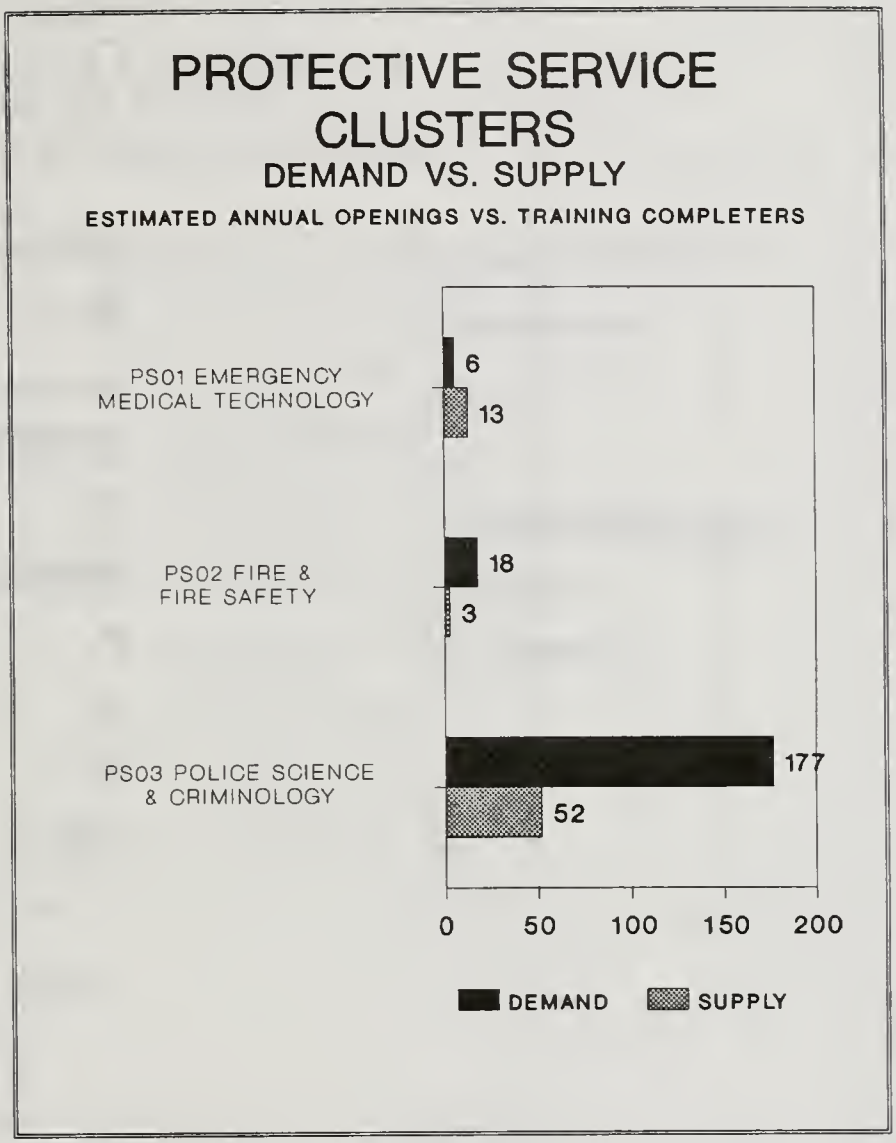


Office Clusters

Shortage/Surplus Situation:

Office clusters contain five of the top 20 high growth occupations for Montana. These are Accounting Clerks, General Managers, Secretaries, General Office Clerks, and Stock Clerks. Training for these occupations is provided through the vocational technical centers, higher education, public secondary programs, Job Corps, and on-the-job training.

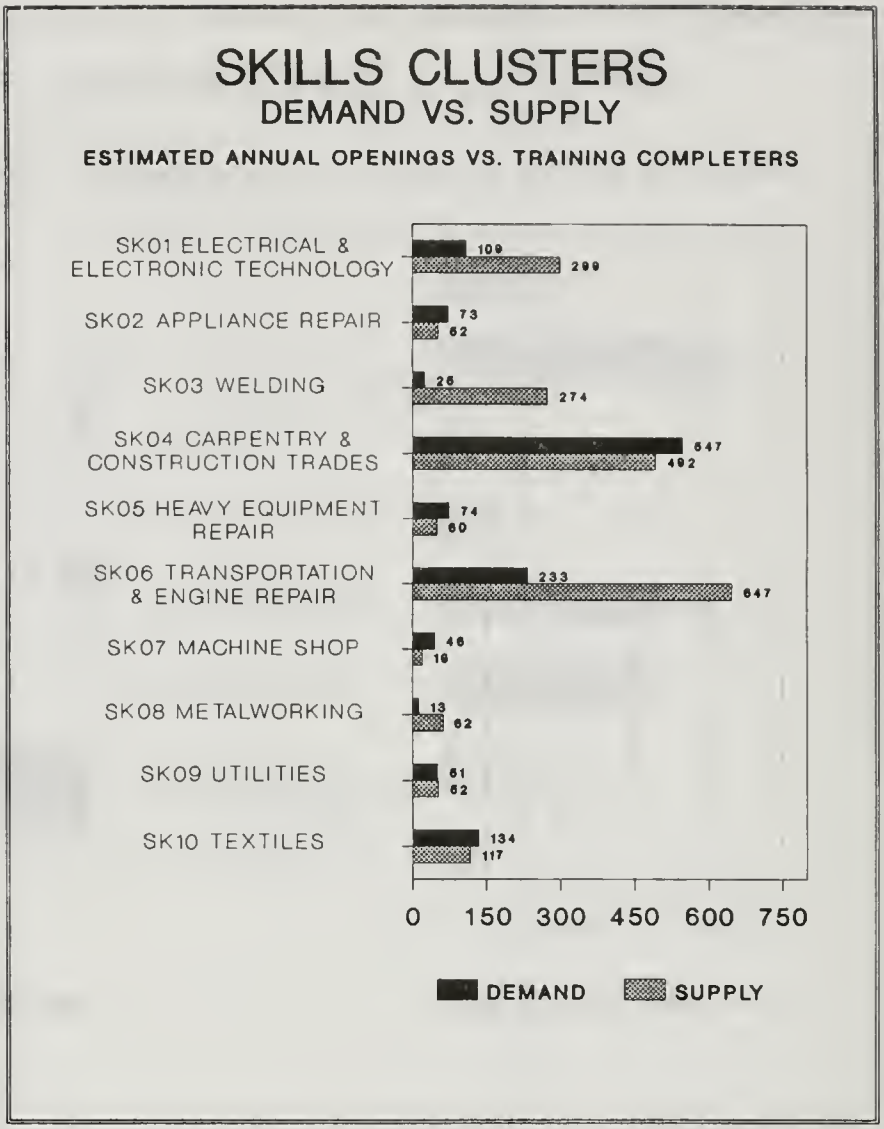
These clusters also include Stenographer, the lowest demand occupation In the state.



Protective Service Clusters

Shortage/Surplus Situation:

The largest demand for these clusters occurs in PS03 (Police Science and Criminology). Complete supply data is not available in this report. Missing data includes data from the smoke jumping school in Missoula and the Highway Patrol Academy in Bozeman.



Skills Clusters

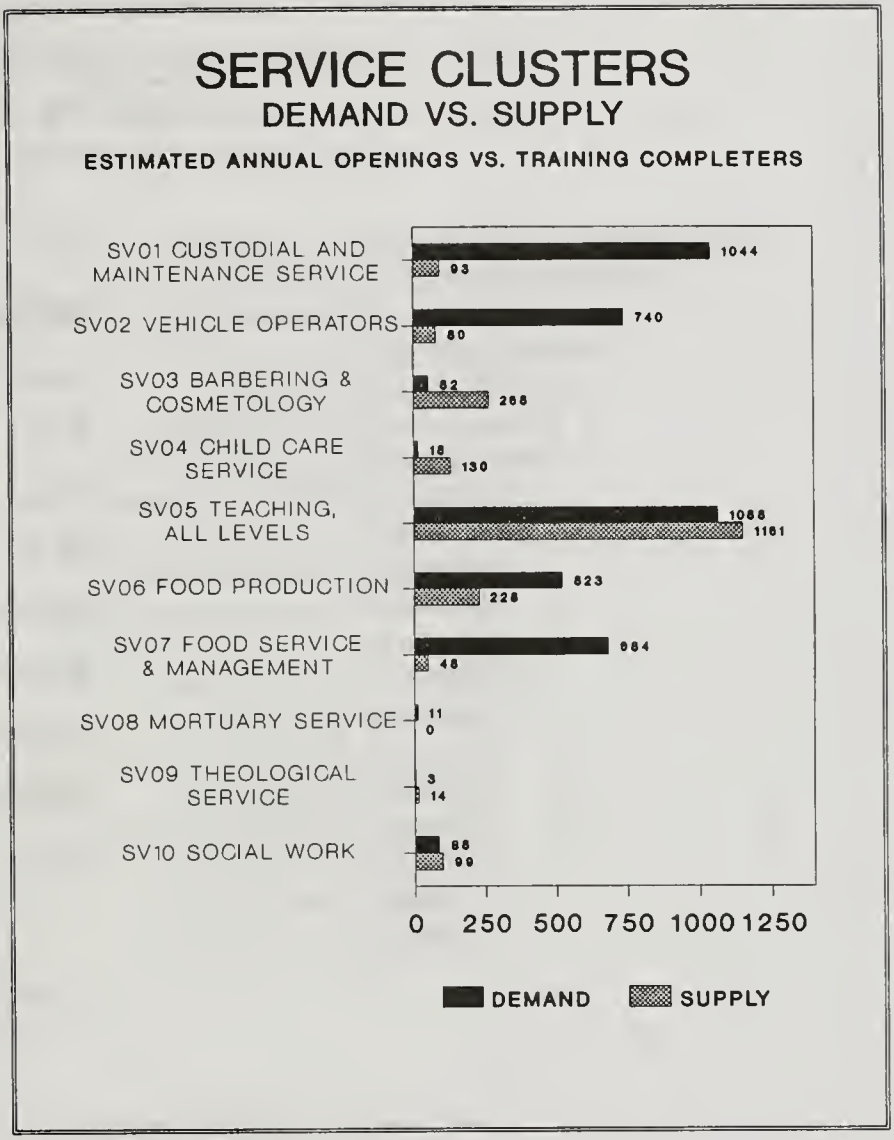
Shortage/Surplus Situation:

Skills clusters include two declining occupations--Machine Tool Operators and Machine Tool Cutters.

Also included in these clusters is Carpentry, one of the 20 high growth occupations for Montana. Some of these workers are self-employed.

Supply data may be missing for SK04 (Carpentry and Construction Trades) and SK06 (Transportation and Engine Repair), because some of these workers are trained on-the-job.

Many occupations in the Skills clusters are apprenticeable.



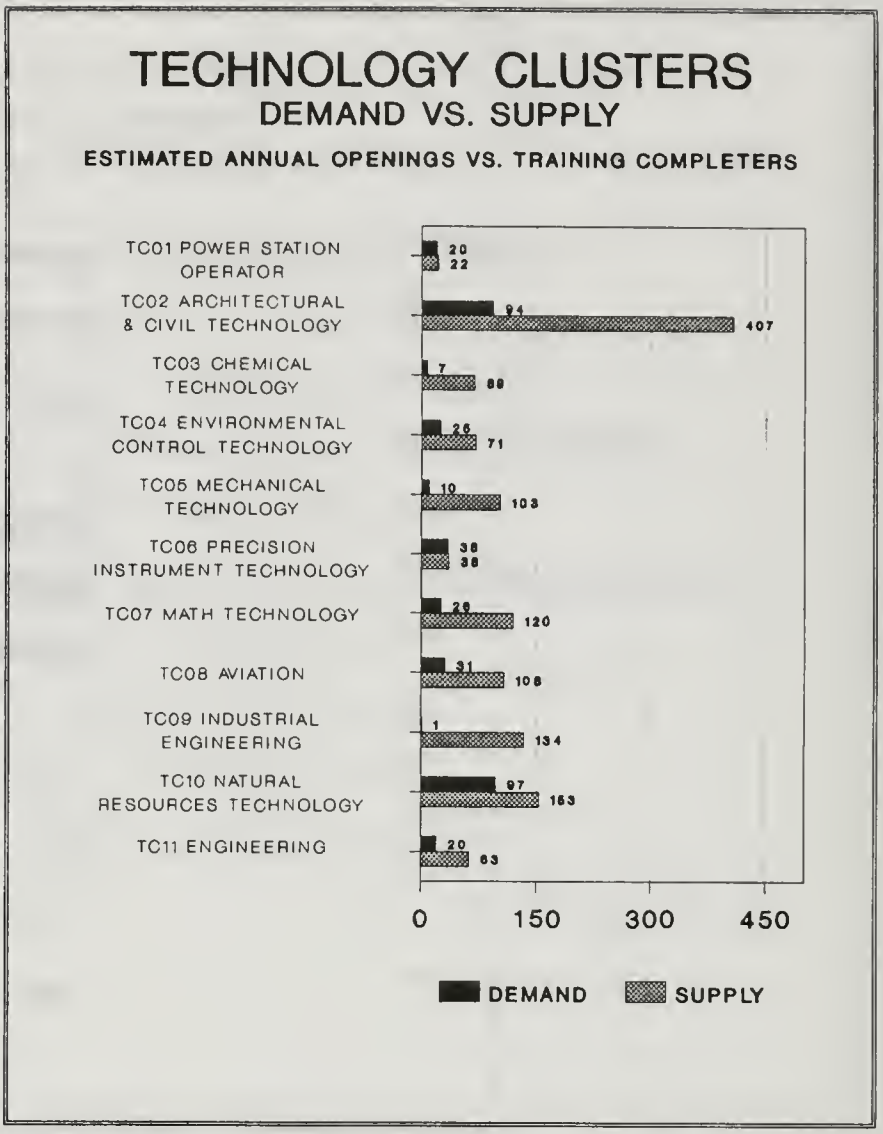
Service Clusters

Shortage/Surplus Situation:

Service clusters include ten of the top 20 high growth occupations.

There are shortages of trained workers shown in four of the clusters. Many workers in these jobs receive training on-the-job, so they are not counted in supply data. Many of these occupations are high-turnover, lower-paying jobs.

There is a surplus shown in SV03 (Barbering and Cosmetology). Training for these occupations is through private schools. Many of these workers may be self-employed.



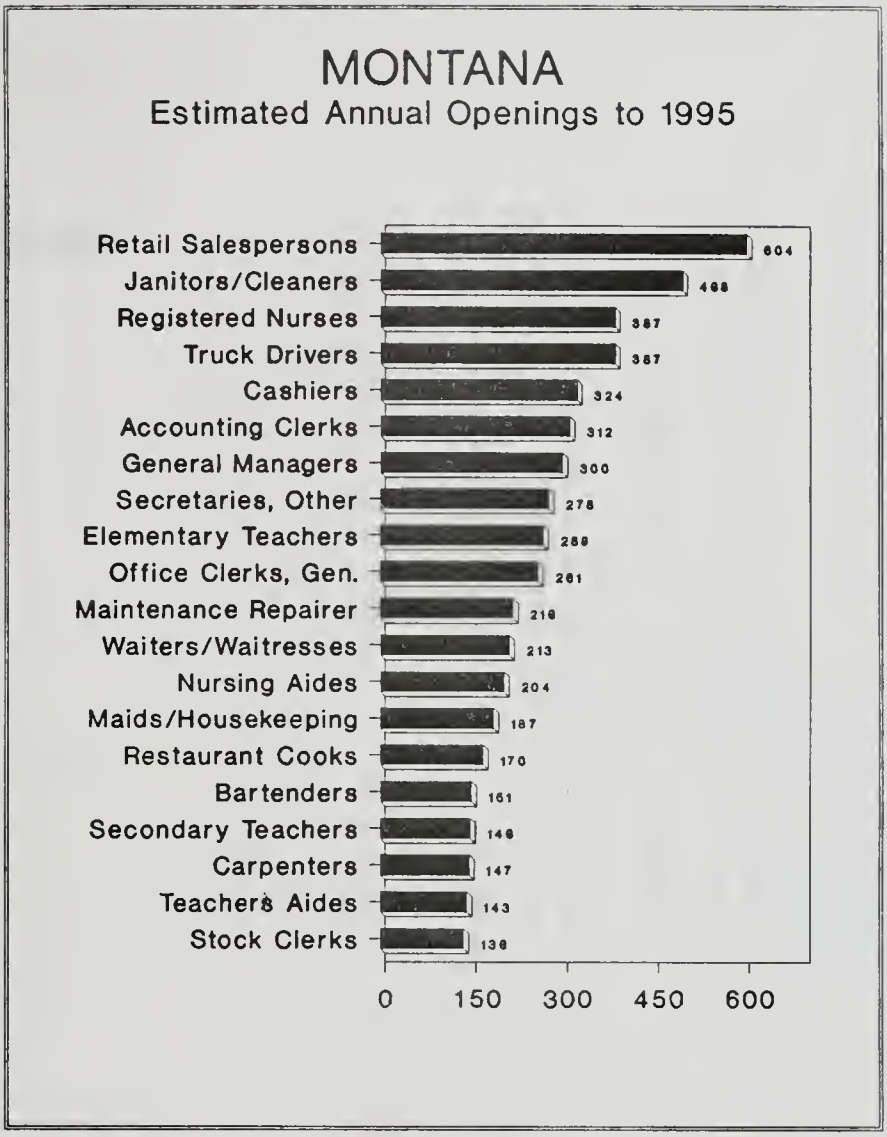
Technology Clusters

Shortage/Surplus Situation:

There is a supply surplus in all but two of the Technology clusters. Many of these trained workers may have to leave Montana to seek employment.

Ten occupations in these clusters are declining occupations in Montana. Most are mining-related occupations.

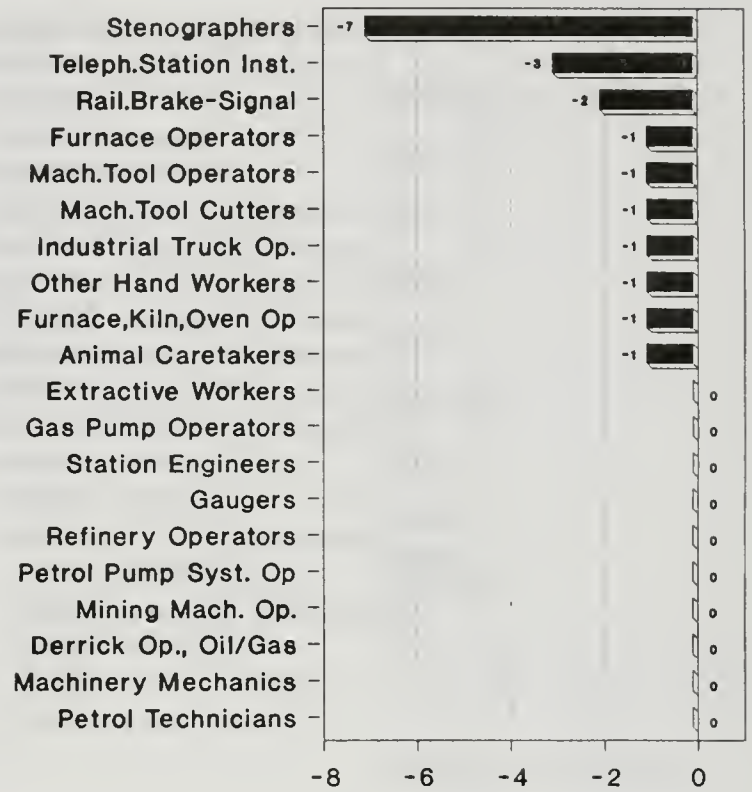
Many occupations in the Technology clusters are apprenticeable.



This chart is based on projections of estimated annual openings. These openings are based on 1) job openings resulting from industry growth, and 2) job openings resulting from separation (deaths and retirements). Therefore, they do not necessarily reflect the industries with the highest growth rates.

MONTANA

Estimated Annual Openings to 1995



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